Myopia control lenses : Current approach and market availability

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Abstract:

Purpose: This purpose of the review is to summarize the currently available myopia control lenses in the market, their mechanisms, effectiveness, and clinical outcomes.

Method: An analysis of peer-reviewed literature, clinical trial data, and product specifications of commercially available myopia control lenses was conducted. The focus was on spectacle lenses designed specifically for myopia management. Databases searched covered PubMed, Embase, Google Scholar, Scopus, Web of science, Cochrane, Clinical Trials without time span constraints.

Results:
Several myopia control lens options are now widely available. Spectacle lenses such as *Essilor Stellest*, *Hoya MiYOSMART*, and *Zeiss MyoVision* use defocus or lenslet technology to slow axial elongation. Clinical studies report a reduction in myopia progression by approximately 40–60% over 2–3 years with consistent use. Safety profiles are favorable, and compliance rates are high in pediatric populations.

Conclusion:
Myopia control lenses represent a significant advancement in slowing the progression of myopia in children. Continued innovation and long-term studies are essential to further optimize treatment efficacy and personalization. Clinicians should consider age, lifestyle, and progression rate when selecting the appropriate lens modality.

Keywords:

Myopia control, spectacle lenses, axial elongation, paediatric myopia, MiYOSMART, Stellest, MiSight